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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Davide Zampini

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EXAMINER

OJURONGBE, OLATUNDE S

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

02/03/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/551,982	Applicant(s) ZAMPINI ET AL.	
	Examiner OLATUNDE S. OJURONGBE	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-13,15-18 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-13, 15-18 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed on 11/21/2008 has been entered. Claims 1, 3-13, 15-18 and 20 are pending in the application.

Specification

2. The disclosure is objected to because of the following informalities:

Page 5, lines 1-3 recite "Any suitable emulsifier may be used in art-recognized quantities. Some commercially-available emulsifier already contain emulsifier, so addition may be unnecessary". It is unclear what the applicants mean by this statement.

Appropriate correction is required.

3. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.

Art Unit: 1796

(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.

(g) BRIEF SUMMARY OF THE INVENTION.

(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).

(i) DETAILED DESCRIPTION OF THE INVENTION.

(j) CLAIM OR CLAIMS (commencing on a separate sheet).

(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

(l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

4. The use of the trademark, such as polyox on page 7, line 13, has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Objections

5. Claims 1, 3-13, 15-18 and 20 are objected to because of the following informalities:

When listing Markush groups in each of claims 1, 3, 4 and 20, the applicants used different punctuation marks that include semicolon, colon and comma. For consistency, the same punctuation mark should be used to separate different Markush groups in the claim as appropriate.

Claim 1 recites "...where m and n are independently from 1-2000, a, b, and c are independently either 0 or 1 and X, Y and Z are selected from-CH₂-CH₂-CH₂-O-CH₂-CHOH-CH₂-N-"; this discloses a bivalent nitrogen.

Dependent claims 3-13, 15-18 and 20 are objected to for the same reason.

Appropriate corrections are required.

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.

7. **Claims 1, 3-13, 15-16, 18 and 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Melbye (EP 0641746, US 5,674,929** is used for ease of citation), in view of **Bell (EP 0200471)**, in further view of **applicant's own admission** found on **page 4, lines 10-15** of the present specification.

Regarding **claims 1, 3-7, 11-13**, Melbye teaches an admixture for use in a cementitious composition which comprises at least one waterproofing agent and at least one water retention agent (col.1, lines 36-39); Melbye further teaches that particularly preferred water proofing materials are paraffin emulsions (col.2, lines 3-7) and the preferred water retention agent is a PAO of molecular weight from 100,000 - 8,000,000 and it is preferred that it is pure poly(ethylene oxide) (col.2, lines 36-44).

Melbye does not teach a composition for improving the properties of a cementitious composition comprising (iii) at least one siloxane compound that is at least one of liquid

Art Unit: 1796

or soluble in at least one of water or aqueous alkali, in which the siloxane compound is selected from those that correspond to the general formula I of the instant claim.

Bell et al teaches that during agitation to prepare concrete mixture, an excessive degree of foaming can occur which can introduce an excessive amount of air into the concrete mixture which can detract from the strength of the hardened concrete (page 10, line 25 - page 11, line 5), Bell et al further teaches the use of antifoaming agents including polysiloxanes to rectify this problem (page 15, lines 25-28).

Since both the inventions of Melbye and Bell are in the same field of endeavor-cementitious compositions, motivated by the advantages of antifoaming agents, it would have been obvious to one of ordinary skill in the art to have incorporated antifoaming agents, including polysiloxane antifoaming agents, into the composition of Melbye. Though modified Melbye does not teach the polysiloxanes of the instant claim, the applicant admits that these siloxanes are known antifoam in the art (Specification, page 4, lines 10-15); hence, the incorporation of the claimed siloxanes into the composition of Melbye is nothing more than the use of a known element for its intended use in a known environment in order to achieve entirely expected result. The selection of a known material based on its suitability for its intended use supported a *prima facie* obviousness determination.

The preamble "A composition for improving the properties of a cementitious composition.." is an intended use statement; statements in the preamble reciting the purpose or intended use of the claimed invention which do not result in a structural

Art Unit: 1796

difference between the claimed invention and the prior art do not limit the claim and do not distinguish over the prior art apparatus.

Regarding **claim 8**, modified Melbye further teaches that it is preferable to use an anionically-emulsified paraffin mixture (fusion point of 45°C - 51°C) with a particle size of less than 2 microns (col.2, lines 3-18).

Regarding **claim 9**, modified Melbye further teaches adding the admixture of the invention to cementitious composition to confer considerable property advantages on the compositions (col.1, lines 31-39).

Regarding **claims 10 and 20**, modified Melbye further teaches adding the admixture of the invention to cementitious composition to confer considerable property advantages on the compositions (col.1, lines 31-39) and exemplifies a composition comprising 5g of the antifoaming agent and about 11kg of cement (Bell, page 19, lines 7-25). This teaches about 0.05% of the antifoaming agent by weight of the cement.

Regarding **claims 15-16**, modified Melbye further teaches the use of 0.01 parts of microsilica based on 100 parts of the composition (see 22 parts microsilica, col.1.5, and line 44).

Art Unit: 1796

Regarding **claim 18**, modified Melbye further teaches the composition comprising of accelerators (co1.5, lines 26-30).

8. **Claim 17** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Melbye (EP 0641746, US 5,674,929** is used for ease of citation), in view of **Bell (EP 0200471)**, in further view of **applicant's own admission** found on **page 4, lines 10-15** of the present specification as evidenced by **Yoshida et al (EP 1093843)**.

Regarding **claim 17**, modified Melbye further teaches the composition comprising beta-naphthalene sulfonate-formaldehyde condensate (BNS) (co1.5, lines 9-10).

Naphthalene sulfonate formaldehyde condensates are known anionic surfactants in the art as evidenced by Yoshida et al [0019, line 1-0020, line 5].

Response to Arguments

9. Applicant's arguments filed on 11/21/2008 have been fully considered but they are not persuasive.

The applicants argue that while it is known that antifoaming is a property exhibited by siloxanes, applicants did not assert that the siloxanes of the present claims were being used for their antifoaming property. Applicants merely stated that siloxane's antifoaming property was known. The examiner disagrees.

The reason or motivation to modify the reference may often suggest what the inventor has done, but for a different purpose or to solve a different problem. It is not necessary

Art Unit: 1796

that the prior art suggest the combination to achieve the same advantage or result discovered by applicant.

The applicants further argue that applicants described the beneficial results obtained through use of the claimed composition and that the benefits could not be expected results from inclusion of an antifoaming agent into the claimed composition. The examiner disagrees.

The examiner notes that the beneficial results the applicants claim are inherent properties of the composition that depend on the components of the composition. Since all the components of the composition of modified Melbye fall within the ranges of the corresponding components of the composition of the present invention, then the beneficial results the applicants claim are exhibited by the composition of modified Melbye.

The applicants further recite data from page 6, line 31 to page 8, line 8 of the present invention to support that the claimed invention possesses unexpected improved properties or properties that the prior art does not have. The applicants argues that admixture 2, which includes a siloxane, exhibit appreciably improved shrinkage character as well as providing better flow characteristics and decreased permeability to water, when compared to compositions lacking the siloxane. The examiner disagrees.

The examiner notes that on the data the applicants cite, admixture 4 also exhibits improved shrinkage character when compared to admixture 1, both admixtures are without siloxane. Moreover, whether the unexpected results are the result of unexpectedly improved results or a property not taught by the prior art, the objective

Art Unit: 1796

evidence of nonobviousness must be commensurate in scope with the claims which the evidence is offered to support. In other words, the showing of unexpected results must be reviewed to see if the results occur over the entire claimed range. In the present case, one cannot tell that the results occur over the entire claimed range because the supporting evidence (data) is very limited; the evidence of nonobviousness is not commensurate in scope with the claims.

Furthermore, the flow characteristics and decreased permeability to water are inherent properties of the composition that depend on the components of the composition. Since all the components of the composition of modified Melbye fall within the ranges of the corresponding components of the composition of the present invention, then the beneficial results the applicants claim are exhibited by the composition of modified Melbye.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLATUNDE S. OJURONGBE whose telephone number is (571)270-3876. The examiner can normally be reached on Monday-Thursday, 7.15am-4.45pm, EST time, Alt Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571)272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1796

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

O.S.O.

/Marc S. Zimmer/

Primary Examiner, Art Unit 1796